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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,898	12/31/2003	Paul J. Buras	API-1022-COS-921	8912
25264 7590 02/07/2007 FINA TECHNOLOGY INC PO BOX 674412 HOUSTON, TX 77267-4412			EXAMINER BRUNSMAN, DAVID M.	
			ART UNIT 1755	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/07/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/749,898	<b>Applicant(s)</b> BURAS ET AL.	
	<b>Examiner</b> David M. Brunzman	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,6-12,15-17,22,25,27,28 and 30-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-12,15-17,22,25,27,28,30-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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Applicant's response filed 20 October 2006 has been carefully considered. The rejection under the first paragraph of 35 U.S.C. 112 is withdrawn in view of the amendment filed

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 has not been amended.

The term "sulfur-containing derivative" is indefinite in that it fails to set forth the precursor from which it is derived, the part of the original component that is to be retained in the "derivative" or the extent to which the original material may be modified yet fall within the scope of "derived".

Note, the instant claims are construed in examination consistent with their broadest reasonable interpretation. For example, the preamble recitation of "a method for reducing hydrogen sulfide emissions" is a statement of intent and claims thereto are anticipated by any teaching of the same process steps whether or not the prior art intended to reduce H<sub>2</sub>S emission solely or in part or even recognized the possibility thereof. A process part of the public domain may not be captured as an exclusive right simply by the recognition of an unrealized advantage thereto. Similarly, a "method of reducing the formation of pyrophoric iron pyrite" effectively comprising combination of a known additive in a vessel is anticipated even if that advantage is not realized but an unavoidable result of a prior art process.

The prior art cited is representative of a large body of prior art disclosing the addition of materials such as zinc oxide to asphalt compositions.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4 6-12, 15-17, 22, 25, 27, 28, 30 and 32-35 are rejected under 35 U.S.C. 102(a or e) as being anticipated by US 6767939.

The reference teaches a method of making an asphalt composition useful to be combined with aggregate for paving roads comprising combining asphalt, a styrene butadiene polymer modifier, MBT, zinc oxide and elemental sulfur at a temperature sufficient to allow stirring (indistinguishable from the lowest temperature for effective pumping). While the zinc oxide is intended as a crosslinking promoter it is present in amounts which anticipate the ranges of the instant claims. See Table 5 (disclosing ingredients in amounts anticipating the instant claims) and the patented claims. The reduction in hydrogen sulfide emissions and iron pyrite formation, as the zinc oxide is present in amounts taught by the instant invention, would be expected to necessarily result therefrom. The examples therein further disclose a method of compatibility testing wherein the combined asphalt heated cast into cylindrical molds removed and cut into multiple pieces. This process anticipates the process of claim 27 wherein, physically removing the asphalt from a location, reducing its size, heating the asphalt and adding the H<sub>2</sub>S scavenger is explicitly claimed "in any order".

As set forth above, a claim including a statement of intended use is anticipated by any teaching of the same process steps whether or not the prior art intended to reduce H<sub>2</sub>S emission solely or in part or even recognized the possibility thereof

Claims 1, 3, 4, 6-12, 15-17, 22, 25 and 30-34 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5104916.

Column 4, lines 6-43 of the patent teach a method of forming an asphalt for use with aggregate in paving roads comprising mixing asphalt (at about 150 C, indistinguishable from 280 F, since "lower temperature would require considerable mixing energy) with a styrene butadiene polymer modifier and 0.1-2% of a vulcanization composition comprising, for example, 1 part

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tetramethylthiuram disulfide, 5 parts zinc oxide, 3 parts stearic acid and 1 part antioxidant.

Calculated as, 0.03-1% ZnO and 0.05-1.4% vulcanization composition less ZnO. The reduction in hydrogen sulfide emissions and iron pyrite formation, as the zinc oxide is present in amounts taught by the instant invention, would be expected to necessarily result therefrom.

The specific reasons for patentability of new claims 30-35 or the limitations thereof are not separately argued and stand rejected for the same reasons set forth for the claims from which they depend.

While the amended claims may not specifically recite that asphalt polymer compositions are included, they are not excluded from the instant claims and the prior art teaching including polymer modified asphalt yet anticipates the instant claims. Contrary to the statement in the response filed claim 16 is not independent. Claim 11, reciting a specific range of crosslinker amounts is substantially overlapped and anticipated by those of the prior art. As set forth above, a claim including a statement of intended use is anticipated by any teaching of the same process steps whether or not the prior art intended to

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6767939, as applied above.

The use of asphalt compositions is admitted to be prior art in the instant specification. The difference between that use and the instant claims is the composition of the asphalt employed. US 6767939 teach that the compositions therein including zinc oxide exhibit better high temperature performance than untreated asphalt. It would have been obvious to one of ordinary skill in the art to employ the asphalt composition of 6767939 in a process of coating roofs because one of ordinary skill in the art would expect better high temperature performance.

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Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5104916, as applied above.

The use of asphalt compositions is admitted to be prior art in the instant specification. The difference between that use and the instant claims is the composition of the asphalt employed. US 5104916 teach that the compositions therein including zinc oxide exhibit better high temperature performance than untreated asphalt. It would have been obvious to one of ordinary skill in the art to employ the asphalt composition of 6767939 in a process of coating roofs because one of ordinary skill in the art would expect better high temperature performance.

Applicants' response while including a *pro forma* traverse of the following double patenting rejections does not particularly point out any reasons or evidence that the rejections are improper or how the amendments entered obviate the double patenting rejections. A simple assertion that the claims would be amended in some unspecified way upon allowance is clearly insufficient to obviate an outstanding rejection. It is considered that applicant has acceded to the merits of the double patenting rejections made. A Terminal Disclaimer to obviate an obviousness type double patenting rejection must be timely filed in order to be granted consideration.

Claims 1, 3, 4, 6-8, 10, 12, 17, 22, 25 and 30-33 of this application conflict with claims 1-3, 7, 9 26, 41-43 and 49 of Application No. 10/749259. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 4, 6-8, 10, 12, 17-19, 22, 25 and 30-33 of this application conflict with claims 22, 23, 28, 32, 36 and 41 of Application No. 10/888563. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting

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claims from all but one application or maintain a clear line of demarcation between the applications.

See MPEP § 822.

Claims 1, 4, 17 and 22, 25, 27, 28, 30-33 and 35 of this application conflict with claims 11, 20, 31-33, 43 and 45-47 of Application No. 10/972022. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 4, 6-8, 10, 12, 17, 22, 25, 27, 28, 30-33 and 35 of this application conflict with claims 1-4, 7, 9, 11, 14-18 and 20-22 of Application No. 11/020774. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1, 3, 4, 17 and 30-33 of this application conflict with claims 1, 2, 7, 9, 14 and 16 of Application No. 11/250665. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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Claims 1, 4, 6-8, 10, 12, 17, 22, 25, 27, 28, 30-33 and 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 7, 9 26, 41-43 and 49 of copending Application No. 10/749259. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 1, 4, 30-33 and 35 of the instant application are anticipated by claim 3 of 749259 differing only in the range of "metal salt" added but, sharing a common endpoint of 0.05% and in that they share zinc oxide in the Markush group. Instant claims 6, 7, 10 and 12 otherwise are anticipated by claim 7 of 749259. Instant claim 8 otherwise is anticipated by claim 9 of 749259. Instant claim 17 is anticipated by claims 1, 7 and 9, respectively, of 749259 in that claim 1, 7 and 9 recite ZnO. Instant claims 22 is otherwise anticipated by claims 41 and 42 of 749259. Instant claim 25 is otherwise anticipated by claims 42 and 41, respectively of 749259 in that a "roof sealed with asphalt" and " a road made from asphalt" immediately and unavoidably disclose the method of sealing a roof comprising spreading asphalt over at least part of it and the method of road building comprising using it to form a road

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 4, 6-8, 10, 12, 17, 22, 25, and 30-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22, 23, 28, 32, 36 and 41 of Application No. 10/888563. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Instant claims 1 and 4, 6, 8, 22, 25 and 30-33 each fully encompass claims 22 and 32 of 888563 in that the terms *about* 0.05 and *about* 0.04 are indistinguishable. Instant claim 8 is disclosed by claims 22 and 32 of 888563, in that the ranges of crosslinker in each claim overlap and there is no showing of record of the criticality of the nonoverlapping portion of the ranges of the instant claims. Instant claims 10 and 12 fully encompass claims 22 and 32 of 888563. Instant claim 17 fully overlaps claims 22 and 32 of 888563.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



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Claims 1, 4, 17, 22, 25, 27, 28, 30-33 and 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11, 20, 31-33, 43 and 45-47 of Application No. 10/972022. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Instant claims 1, 4, 17, 30-33 and 35 each fully encompass claims 11 and 20 of 972022. Instant claims 22, 25, 27 and 28 are anticipated by claims 32, 33, 34, 35, 44, 46 and 47, respectively, of 972022 except in that the instant claims require addition of particular metal salts. Claim 31 is evidence that it would be obvious to one of ordinary skill in the art to add a metal salt, such as zinc oxide to the asphalt compositions recited in claims 32, 33, 34, 35, 44, 46 and 47 of 972022.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 4, 6-8, 10, 12, 17, 22, 25, 27, 28, 30-33 and 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7, 9, 11, 14-18 and 20-22 of Application No. 11/020774. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Instant claims 1 and 4 are anticipated by claims 3 and 11 of 020774. Instant claims 6 and 7 are anticipated by claims 3 and 11 of 020774. Instant claim 8 is anticipated except that the ranges of crosslinking agent present differ, yet substantially overlap. Instant claims 10, 12 and 17 fully encompass claim 3 of 020774. Instant claims 22, 25, 27 and 28 are anticipated by claims 14, 15, 16, 17, 20, 21 and 22, respectively of 020774.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 4, 17 and 30-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 7, 9, 14 and 19 of Application No. 11/250665. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 1 of 250665 recites modifying a crude fraction by addition of a metal oxide. Claim 2 thereof teaches that the emission reducing metal oxide may be zinc oxide. Claim 7 thereof teaches

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the "crude fraction" includes materials comprising asphalt. Thus, claim 2, at least, of 250665 anticipates instant claims 1 and 30-33. Claim 9 of 250665 recites that the amount of metal oxide emission reducer to be added to the asphalt should fall within 0.05-2wt.%. It would have been obvious to one of ordinary skill in the art to add amounts that fall within this range as recited by instant claims 4 and 17, in order to obtain the optimal emissions reduction from asphalt fractions because claim 9 of 250665 recites these are effective amounts. Claim 14 of 250665 provides convincing evidence that the addition of metal oxides to crude fractions, including asphalt, reduces the sulfur (hydrogen sulfide) emissions to less than 10ppm. This range anticipates instant claim 30.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, W, F, Sa; 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M Brunsman  
Primary Examiner  
Art Unit 1755

DMB

A handwritten signature in black ink, appearing to read 'David M Brunsman', with a stylized, elongated horizontal stroke at the end.